Injection Drug Users

The most commonly injected illicit drugs in the United States are cocaine, amphetamines, heroin, and other opiates (AVERT). In 2009, it was estimated that 2.6% of persons in the United States had ever used illicit injection drugs and that 0.3% or approximately one million persons had used illicit injection drugs in the past year (Lansky et al., 2012).

Nationally, HIV incidence among injection drug users (IDUs) has decreased by approximately 80% since the late 1980s, however, the decline has slowed in recent years and injection drug use remains an important route of HIV transmission in the U.S., particularly among women (CDC, 2013c; Hall, Song, Rhodes, and et al., 2008). Among females aged ≥13 years living with HIV at year-end 2010, 25% of infections were due to injection drug use (CDC, 2013a). At the end of 2010, among males aged ≥13 years living with HIV, 13% of infections were attributed to injection drug use and 7% to male-to-male sexual contact and injection drug use (CDC, 2013a).

IDUs are at increased risk of acquiring HIV due to a number of behaviors including sharing needles or drug preparation equipment and increased likelihood of engaging in risky sexual behaviors (U.S. Department of Health and Human Services). Some illicit drugs, like methamphetamine, can dry out mucosal tissues, leading to small tears and cuts during sex which can increase risk of HIV transmission (CDC).

Data collected in 2009 from 20 U.S. cities that have high rates of HIV infection found that IDUs reported high levels of risky practices, including sharing syringes (34%) and sharing of other injection equipment (58%) (CDC, 2012). Unprotected vaginal sexual contact in the past 12 months was reported by 69% of respondents and 23% reported unprotected heterosexual anal intercourse (CDC, 2012).

In addition to increased HIV transmission risk, use of illicit drugs can negatively affect HIV treatment efficacy and can reduce compliance with HIV treatment regimens (U.S. Department of Health and Human Services).

HIV Disease Diagnoses

In Illinois, from 2009–2013, injection drug use was a transmission risk factor for 4.2% (n=387) of newly diagnosed individuals with an identified transmission risk category.* Individuals who identified as both men who have sex with men (MSM) and IDUs accounted for an additional 2.2% of new diagnoses of HIV disease during this five-year period (n=203).**

Since 2000, the number of HIV infections diagnosed among IDUs in Illinois has declined. In 2013, 65 new HIV disease diagnoses were attributed to injection drug use compared to 684 in 2000 (Figure 6). The reasons for this decline are not well documented but may include decreased viral load among HIV positive IDUs due to effective treatment and the impact of prevention programs such as clean needle exchanges (Gilber, Buxton, and Tupper, 2011; North American Syringe Exchange Network).

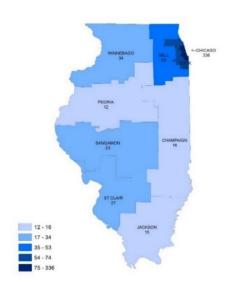
Geography

The majority of HIV diagnoses among IDUs from 2009–2013 were in Chicago (n=336) and Cook County (n=74). Outside of Chicago and the collar counties, less than 40 diagnoses per region attributable to injection drug use occurred over this five-year period.

^{*9,002} new HIV diagnoses were reported from 2009–2013; 1,955 had no risk category reported

^{**}Subsequent numbers for IDUs in this section include IDU+MSM

Figure 1. HIV Disease Diagnoses among Injection
Drug Users by Region, Illinois, 2009–2013

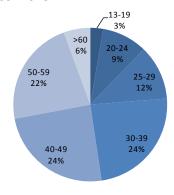


Source: Illinois Department of Public Health, June, 2014

Age at Diagnosis

Most IDUs were diagnosed with HIV disease when ≥30 years of age. Almost a third of persons diagnosed from 2009–2013 with injection drug use as the transmission risk category were ≥50 years at time of diagnosis.

Figure 2. HIV Disease Diagnoses among Injection Drug Users by Age at Diagnosis, Illinois, 2009–2013



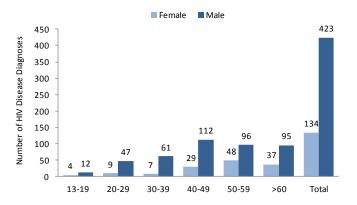
Source: Illinois Department of Public Health, June, 2014

Sex

There were three times more males than females diagnosed with HIV disease in Illinois who identified injection drug use as a risk factor from 2009–2013. Among males, the highest number of new HIV disease diagnoses were among adults 40–49 years

old. Among females, the highest number of new HIV disease diagnoses were identified among adults 50–59 years.

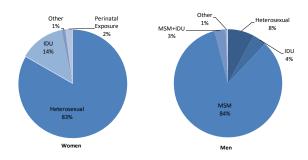
Figure 3. HIV Disease Diagnoses among Injection Drug Users by Sex and Age at Diagnosis, Illinois, 2009–2013



Source: Illinois Department of Public Health, June, 2014

Although more males in Illinois were diagnosed with HIV who identified injection drug use as a mode of transmission, injection drug use accounted for a larger percentage of new HIV disease diagnoses among women (14%) compared to men (7%) from 2009–2013.

Figure 4. HIV Disease Diagnoses by Transmission Risk Category and Sex, Illinois, 2009–2013

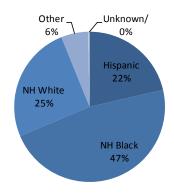


Source: Illinois Department of Public Health, June, 2014

Race/Ethnicity

Among persons newly diagnosed with HIV disease in Illinois from 2009–2013 who identified injection drug use as a transmission risk factor, 47% were non-Hispanic (NH) black and 25% were NH white. NH blacks accounted for 14.2% of the total population of Illinois in 2013 (U. S. Census Bureau, 2014).

Figure 5. HIV Disease Diagnoses among Injection Drug Users by Race/Ethnicity, Illinois, 2009–2013

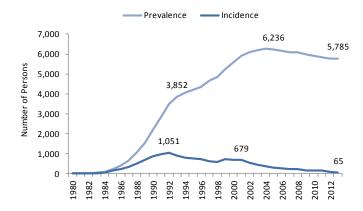


Source: Illinois Department of Public Health, June, 2014

Persons Living with HIV Disease

At the end of 2013, there were 5,785 persons living with diagnosed HIV disease in Illinois with injection drug use as the transmission risk category. The declining number of IDUs living with HIV disease, despite new HIV diagnoses, indicates lower survival in this risk group. Health care providers may be more likely to defer HIV treatment for IDUs which can contribute to lower survival rates (Westergaard, Ambrose, Mehta, and Kirk, 2012). Significant Hepatitis C co-infection may also be a contributing factor to higher mortality rates among IDUs (May et al., 2015).

Figure 6. HIV Disease Diagnoses and Persons Living with HIV Disease among Injection Drug Users, Illinois, 1980–2013



Source: Illinois Department of Public Health, June, 2014

AIDS Diagnoses

The number of new AIDS diagnoses among IDUs in Illinois has declined significantly since peaking in 1993. Since 2012, fewer than 100 AIDS diagnoses have occurred annually in Illinois among IDUs.

Figure 7. New AIDS Diagnoses among Injection Drug
Users by Year of Diagnosis, Illinois, 1982–
2013

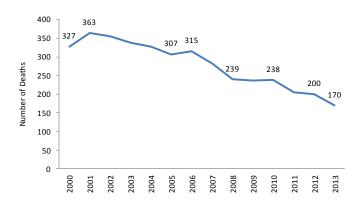


Source: Illinois Department of Public Health, June, 2014

Mortality

Deaths among HIV positive injection drug users have declined since 2000. However, this decline has been lower when compared to other risk groups, such as MSM. Older age at diagnosis among IDUs (Figure 3) may negatively affect survival rates (Costagliola, 2014).

Figure 8. Deaths among HIV Positive Injection Drug Users by Year of Death, Illinois, 2000–2013



Source: Illinois Department of Public Health, April, 2015

REFERENCES

- AVERT. People who Inject Drugs and HIV/AIDs.

 Retrieved 2016, May 16, from

 http://www.avert.org/people-inject-drugs-hiv-aids.htm
- Centers for Disease Control and Prevention (CDC). (2013). HIV and Substance Use in the United States. Retrieved May 16, 2014, from http://www.cdc.gov/hiv/risk/behavior/substanceuse.html
- CDC. (2012). HIV Infection and HIV-Associated Behaviors among Injecting Drug Users - 20 Cities, United States, 2009. MMWR Morb Mortal Wkly Rep, 61(8), 133-138.
- CDC. (2013a). Diagnoses of HIV Infection in the
 United States and Dependent Areas, 2011.
 23, from
 http://www.cdc.gov/hiv/pdf/statistics_2011
 _HIV_Surveillance_Report_vol_23.pdf
- CDC. (2013c). National HIV Behavioral Surveillance
 System Round 4: Model Surveillance
 Protocol. Retrieved from
 http://www.cdc.gov/hiv/pdf/NHBS_Round4
 ModelSurveillanceProtocol.pdf.
- Costagliola, D. (2014). Demographics of HIV and aging. *Curr Opin HIV AIDS*, *9*(4), 294-301.
- Gilber, M., Buxton, J., and Tupper, K. (2011).

 Decreasing HIV Infections among People who
 Use Drugs by Injection in British Columbia:

 Potential Explanations and
 Recommendations for Further Action. British
 Columbia: Retrieved from
 http://www.health.gov.bc.ca/library/publica
 tions/year/2011/decreasing-HIV-in-IDUpopulation.pdf.
- Hall, H., Song, R., Rhodes, P., and et al. (2008). Estimation of HIV Incidence in the United States. *JAMA*, 300(5), 520-529.
- Illinois Department of Public Health (IDPH). (April, 2015). Illinois Enhanced HIV/AIDS Reporting System.
- IDPH. (June, 2014). *Illinois Enhanced HIV/AIDS Reporting System*.
- Lansky, A., Finlayson, T., Johnson, C., Holtzman, D., Wejnert, C., Mitsch, A., Crepaz, N. (2012). Estimating the Number of Injection Drug Users in the United States to Calculate National Rates of HIV Infection. Paper presented at the 2012 National Summit on HIV and Viral Hepatitis Diagnosis, Prevention, and Access to Care Washington, DC.

- http://www.hivforum.org/storage/documents/_2012NationalSummit_Posting/c_03_01_lansky.pdf
- May, M. T., Justice, A. C., Birnie, K., Ingle, S. M., Smit, C., Smith, C., Sterne, J. A. (2015). Injection Drug Use and Hepatitis C as Risk Factors for Mortality in HIV-infected Individuals: The Antiretroviral Therapy Cohort Collaboration. *J Acquir Immune Defic Syndr*.
- North American Syringe Exchange Network. Illinois Syringe Exchange Programs. Retrieved May 6, 2015, from https://nasen.org/directory/il/
- U. S. Census Bureau. (2014). Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: April 1, 2010 to July 1, 2013. Retrieved October 1, 2014, from http://factfinder2.census.gov/faces/tableser vices/jsf/pages/productview.xhtml?src=bkm k
- U.S. Department of Health and Human Services.

 Substance Abuse Issues. Retrieved May 16,
 2014, from http://aids.gov/hiv-aidsbasics/staying-healthy-with-hiv-aids/takingcare-of-yourself/substance-abuseissues/index.html
- Westergaard, R. P., Ambrose, B. K., Mehta, S. H., and Kirk, G. D. (2012). Provider and Cinic-Level Correlates Of Deferring Antiretroviral Therapy For People Who Inject Drugs: A Survey Of North American HIV Providers. *J Int AIDS Soc, 15*, 10-10.